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|     |          | Notice of Refere                                                                                                                                                                                                     | neos Citos | ,                       | 09/198,022                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | RHOADS:         |                          |           |                      |  |
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|     |          |                                                                                                                                                                                                                      |            |                         | Andrew W. Johns                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                 | 2621                     | 9,050     |                      |  |
| -4- | DOCUMENT |                                                                                                                                                                                                                      |            |                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                 |                          |           |                      |  |
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|     | Α        | 4,689,477                                                                                                                                                                                                            | Aug. 1987  | Goldman                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 235             | 380                      | Ø         |                      |  |
|     | В        | 5,471,533                                                                                                                                                                                                            | Nov. 1995  | Wang et al              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 380             | 51                       | ⊠         | 0                    |  |
|     | С        | 5,659,726                                                                                                                                                                                                            | Aug. 1997  | Sandford, II et al. 395 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                 | 612                      | ⊠         |                      |  |
|     | D        | 5,721,788                                                                                                                                                                                                            | Feb. 1998  | Powell et a             | l.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | 382             | 100                      | ×         |                      |  |
|     | E        |                                                                                                                                                                                                                      |            |                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                 |                          |           |                      |  |
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|     | J        |                                                                                                                                                                                                                      |            | 1                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                 |                          |           |                      |  |
|     | к        |                                                                                                                                                                                                                      |            |                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                 | -                        |           |                      |  |
|     | L        |                                                                                                                                                                                                                      |            |                         | <del>,-</del>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                 |                          |           |                      |  |
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|     |          |                                                                                                                                                                                                                      | 1          | FOREIGN                 | PATENT DOCUMENTS                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | <u> </u>        |                          | DOCUME    | NIT                  |  |
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|     | z        | 29 43 436 A1                                                                                                                                                                                                         | May. 1981  | DE                      | Szepanski                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | G06K            | 19/06 ,                  |           | Ø                    |  |
|     | 0        |                                                                                                                                                                                                                      |            |                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                 | i                        |           |                      |  |
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|     |          | <u> </u>                                                                                                                                                                                                             |            |                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                 |                          |           |                      |  |
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| Ø   | υ        | Kawaguchi et al., "Principle and Applications of BPCS-Steganography," Proc. SPIE Vol. 3528: Multimedia Systems and Applications, 2-4 Nov. 1998, pp. 464-473.                                                         |            |                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                 |                          |           | Ø                    |  |
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|     | x        | Szepanski, "A Signal Theoretic Method for Creating Forgery-Proof Documents for Automatic Verification,"<br>Proc. 1979 Carnahan Conf. on Crime Countermeasures, 16-18 May 1979, pp. 101-109.                          |            |                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                 |                          |           | ⊠                    |  |
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<sup>\*</sup>A copy of this reference is not being furnished with this Office action. (See Manual of Patent Examining Procedure, Section 707.05(a).)
\*\*APS encompasses any electronic search i.e. text, image, and Commercial Databases.

U.S. Patent and Trademark Office

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| * |                            | DOCUMENT NO.                                                                                                                                                | DATE     | NAME      |                                     | CLASS                                               | SUBCLASS | DOCUMENT<br>SOURCE ** |                       |  |
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| * |                            | DOCUMENT (Including Author, Title Date, Source, and Pertinent Pages)                                                                                        |          |           |                                     |                                                     |          |                       | DOCUMENT<br>SOURCE ** |  |
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|   | U                          | Chow et al., "Forgery and Tamper-Proof Identification Document," IEEE Proc. 1993 Int. Carnahan Conf. on Security Technology, 13-15 October 1993, pp. 11-14. |          |           |                                     |                                                     |          | ⊠                     |                       |  |
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<sup>&</sup>quot;A copy of this reference is not being furnished with this Office action. (See Manual of Patent Examining Procedure, Section 707.05(a).)
"APS encompasses any electronic search i.e. text, image, and Commercial Databases.

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